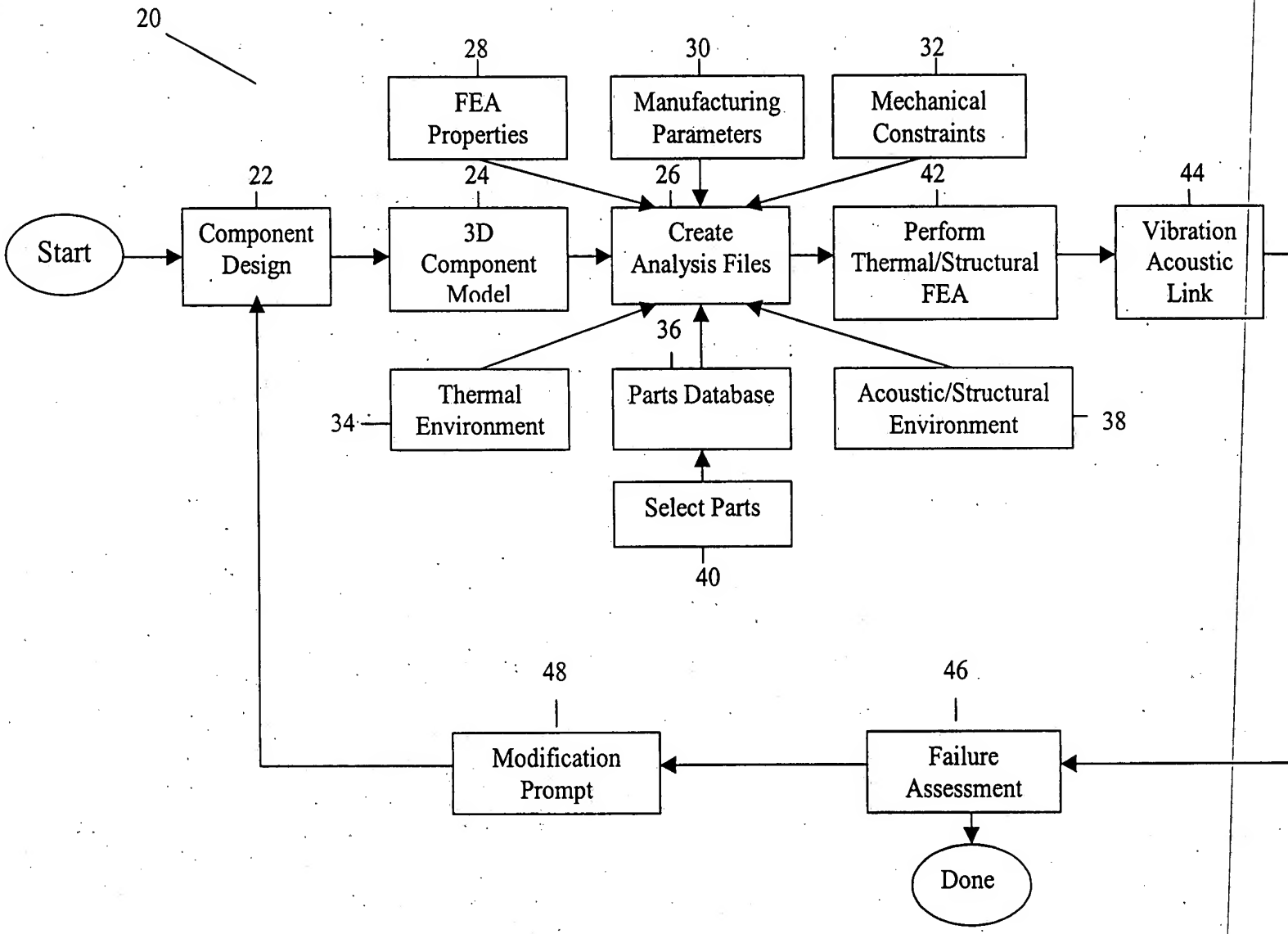
FIG. 1.



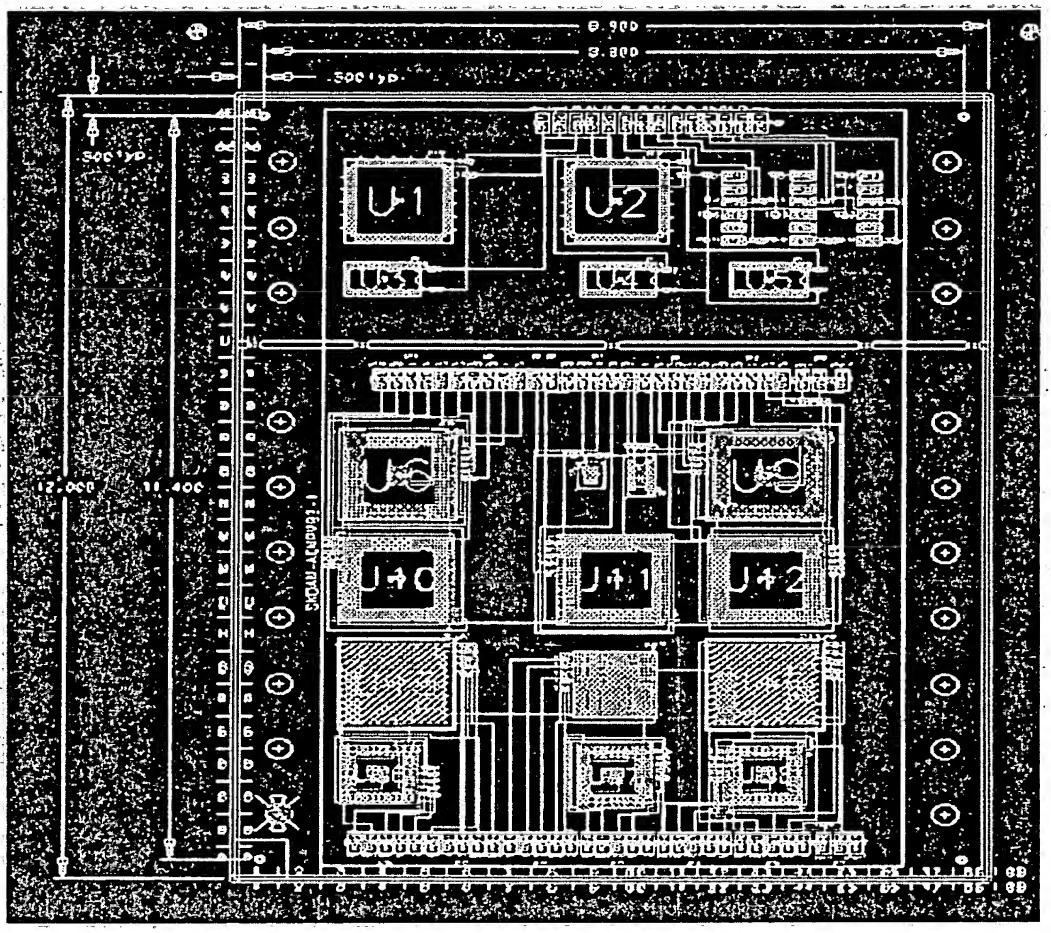


FIG. 2.

Title: *Method, System and Computer Program Product for Multidisciplinary Design Analysis of Structural Components*
Inventor(s): Mostafa Rassaian
Application No: To be assigned
Atty Dkt No: 38190/235695

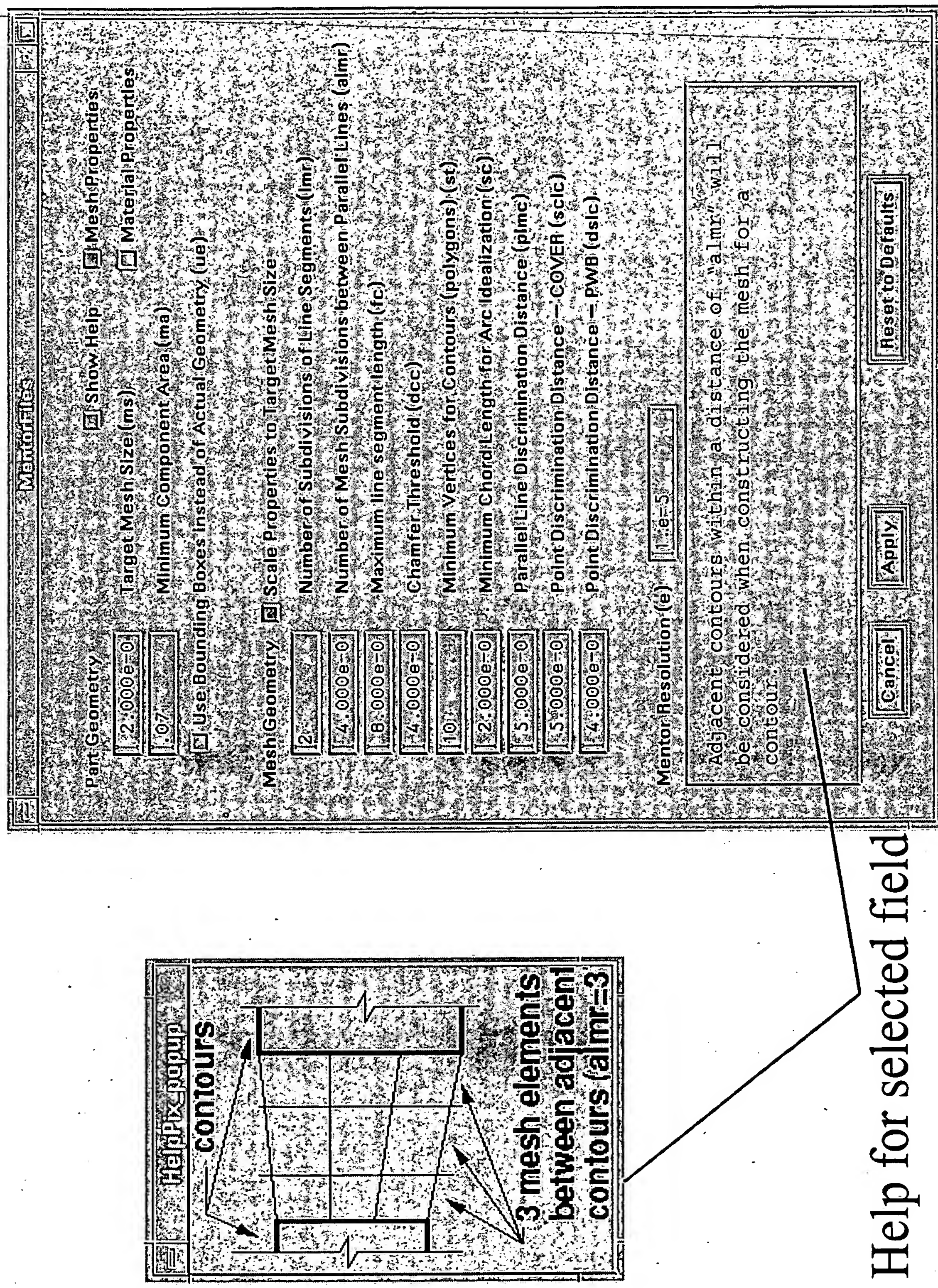
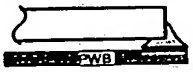
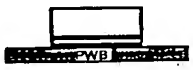
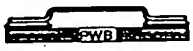
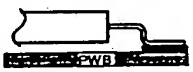
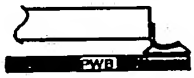
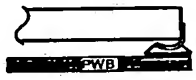
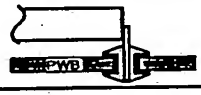


Figure 3

FIG. 4.

	Durability Module	Description	Configuration
	CCC	Leadless chip component	
54	DIO	Planar-diode package	
52	IND	Inductor feedthrough foil	
58	Hybrid-GW	Gull wing	
58	Hybrid-SGW	Spider gull wing	
56	L-lead	L-leaded component	
56	J-lead	J-leaded component	
	PTH	Plated-through-hole component	
59	PBGA	Plastic ball grid arrays	

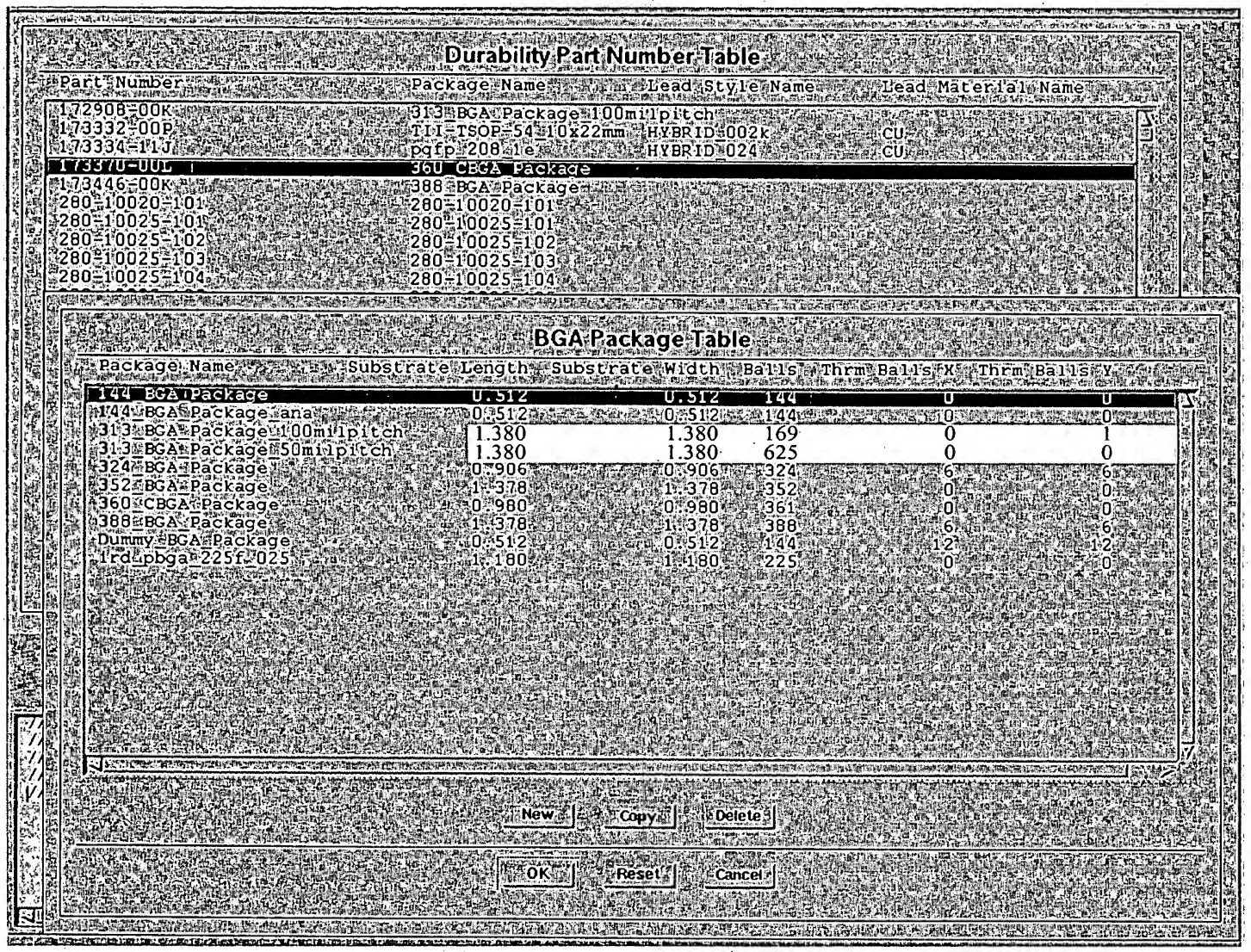


FIG. 5.

Title: *Method, System and Computer Program Product for Multidisciplinary Design Analysis of Structural Components*
Inventor(s): Mostafa Rassaian
Application No: To be assigned
Atty Dkt No: 38190/235695

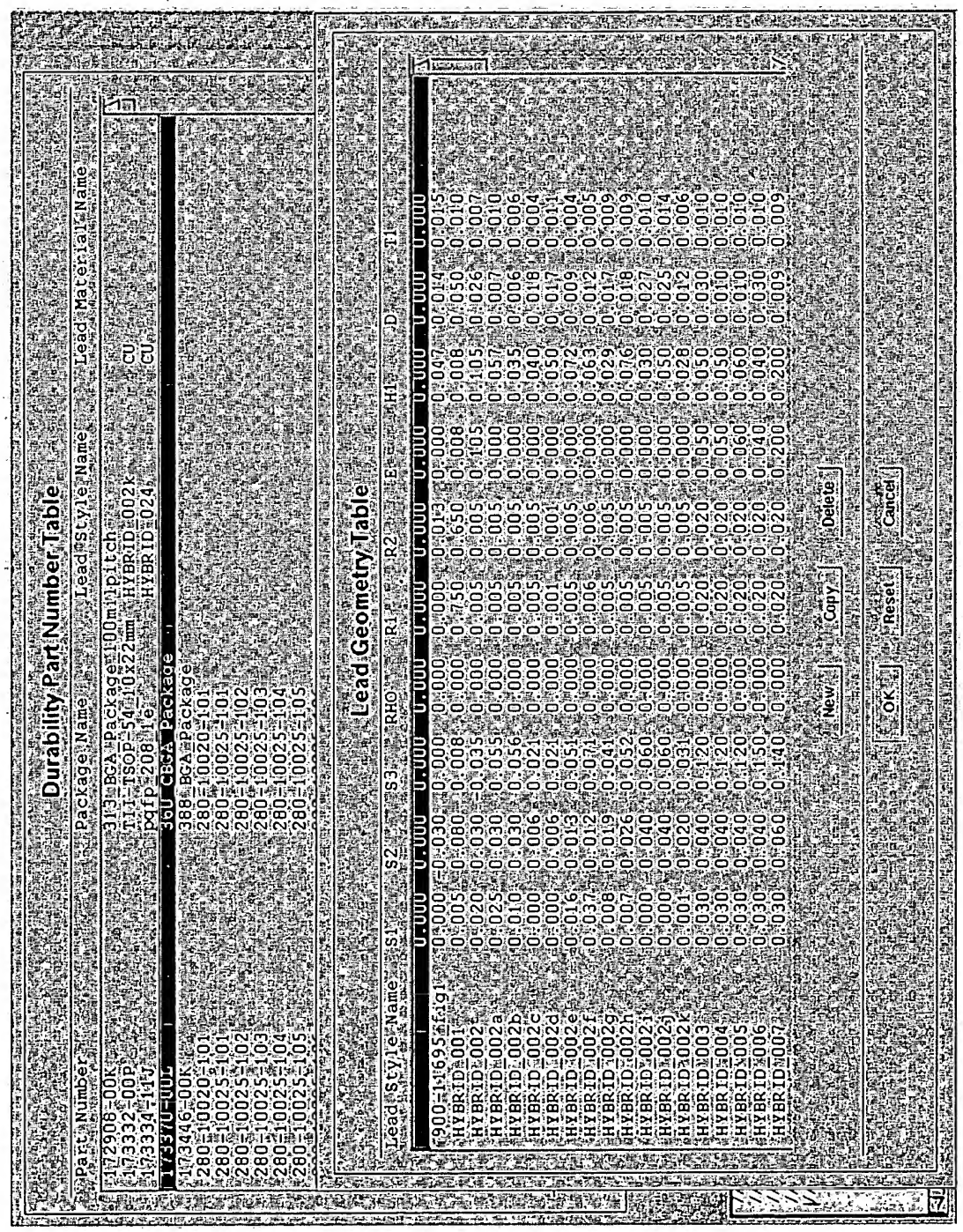
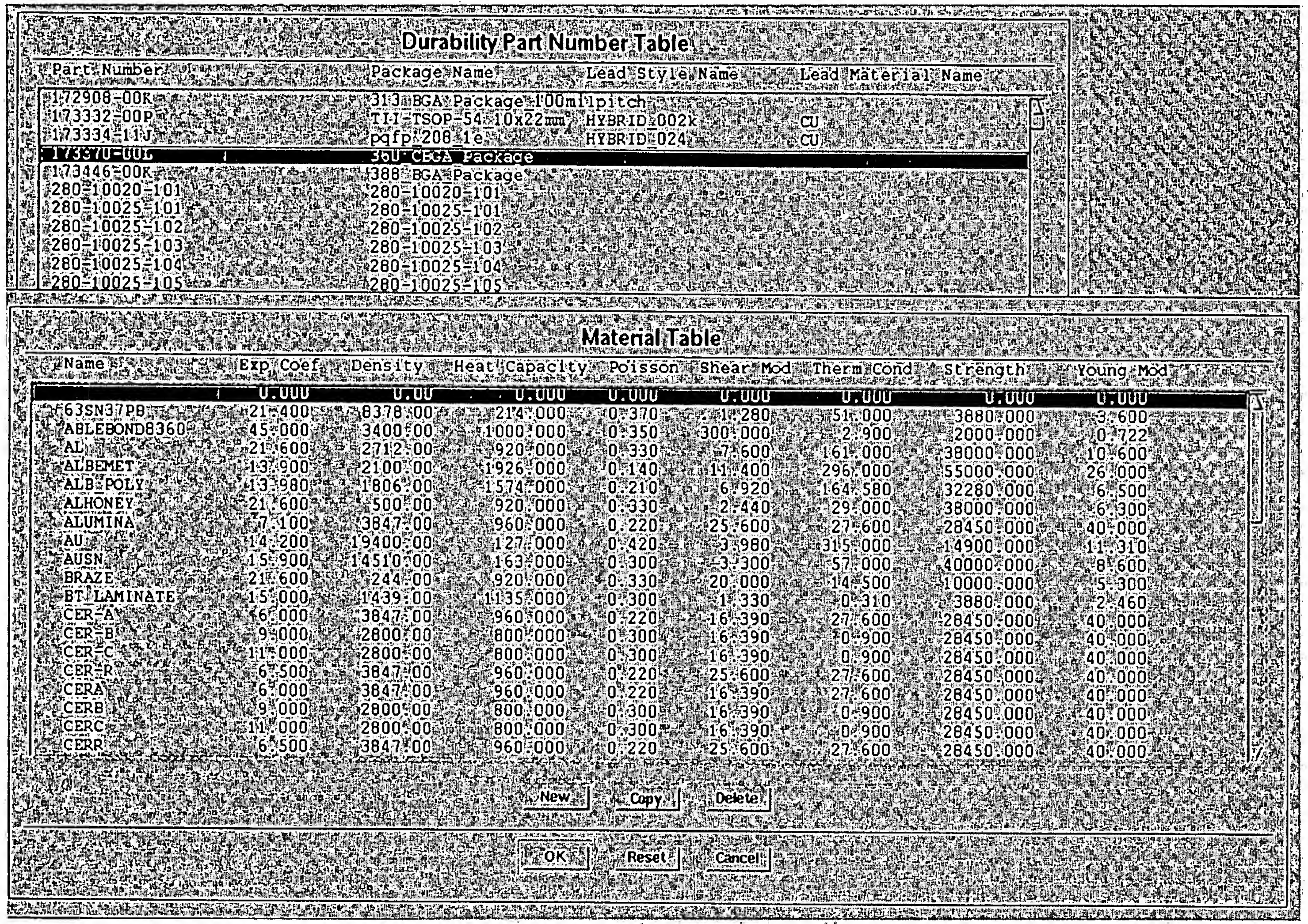


FIG. 6.

Title: *Method, System and Computer Program Product for Multidisciplinary Design Analysis of Structural Components*
Inv[redacted]): Mostafa Rassaian
App[redacted]on No: To be assigned
Atty Dkt No: 38190/235695



Part Number	Package Name	Lead Style Name	Lead Material Name
172908-00K	313 BGA Package 100milpitch		
173332-00P	TII-TSOP-54 10x22mm	HYBRID 002k	CU
173334-11J	pqfp 208 le	HYBRID 024	CU
173370-00L	360 CBGA Package		
173446-00K	388 BGA Package		
280-10020-101	280-10020-101		
280-10025-101	280-10025-101		
280-10025-102	280-10025-102		
280-10025-103	280-10025-103		
280-10025-104	280-10025-104		
280-10025-105	280-10025-105		

Name	Exp Coef	Density	Heat Capacity	Poisson	Shear Mod	Therm Cond	Strength	Young Mod
	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
63SN37PB	21.400	8378.00	214.000	0.370	1.280	51.000	3880.000	3.600
ABLEBOND8360	45.000	3400.00	1000.000	0.350	300.000	2.900	2000.000	0.722
AL	21.600	2712.00	920.000	0.330	7.600	161.000	38000.000	10.600
ALBEMET	13.900	2100.00	1926.000	0.140	11.400	296.000	55000.000	26.000
ALB POLY	13.980	1806.00	1574.000	0.210	6.920	164.580	32280.000	6.500
ALHONEY	21.600	500.00	920.000	0.330	2.440	29.000	38000.000	6.300
ALUMINA	7.100	3847.00	960.000	0.220	25.600	27.600	28450.000	40.000
AU	14.200	19400.00	127.000	0.420	3.980	315.000	14900.000	11.310
AUSN	15.900	14510.00	163.000	0.300	3.300	57.000	40000.000	8.600
BRAZE	21.600	244.00	920.000	0.330	20.000	14.500	10000.000	5.300
BT LAMINATE	15.000	1439.00	1135.000	0.300	1.330	0.310	3880.000	2.460
CER-A	6.000	3847.00	960.000	0.220	16.390	27.600	28450.000	40.000
CER-B	9.000	2800.00	800.000	0.300	16.390	0.900	28450.000	40.000
CER-C	11.000	2800.00	800.000	0.300	16.390	0.900	28450.000	40.000
CER-R	6.500	3847.00	960.000	0.220	25.600	27.600	28450.000	40.000
CERA	6.000	3847.00	960.000	0.220	16.390	27.600	28450.000	40.000
CERB	9.000	2800.00	800.000	0.300	16.390	0.900	28450.000	40.000
CERC	11.000	2800.00	800.000	0.300	16.390	0.900	28450.000	40.000
CERR	6.500	3847.00	960.000	0.220	25.600	27.600	28450.000	40.000

FIG. 7.

Title: *Method, System and Computer Program Product for Multidisciplinary Design Analysis of Structural Components*
[redacted]entor(s): Mostafa Rassaian
[redacted]plication No: To be assigned
Atty Dkt No: 38190/235695

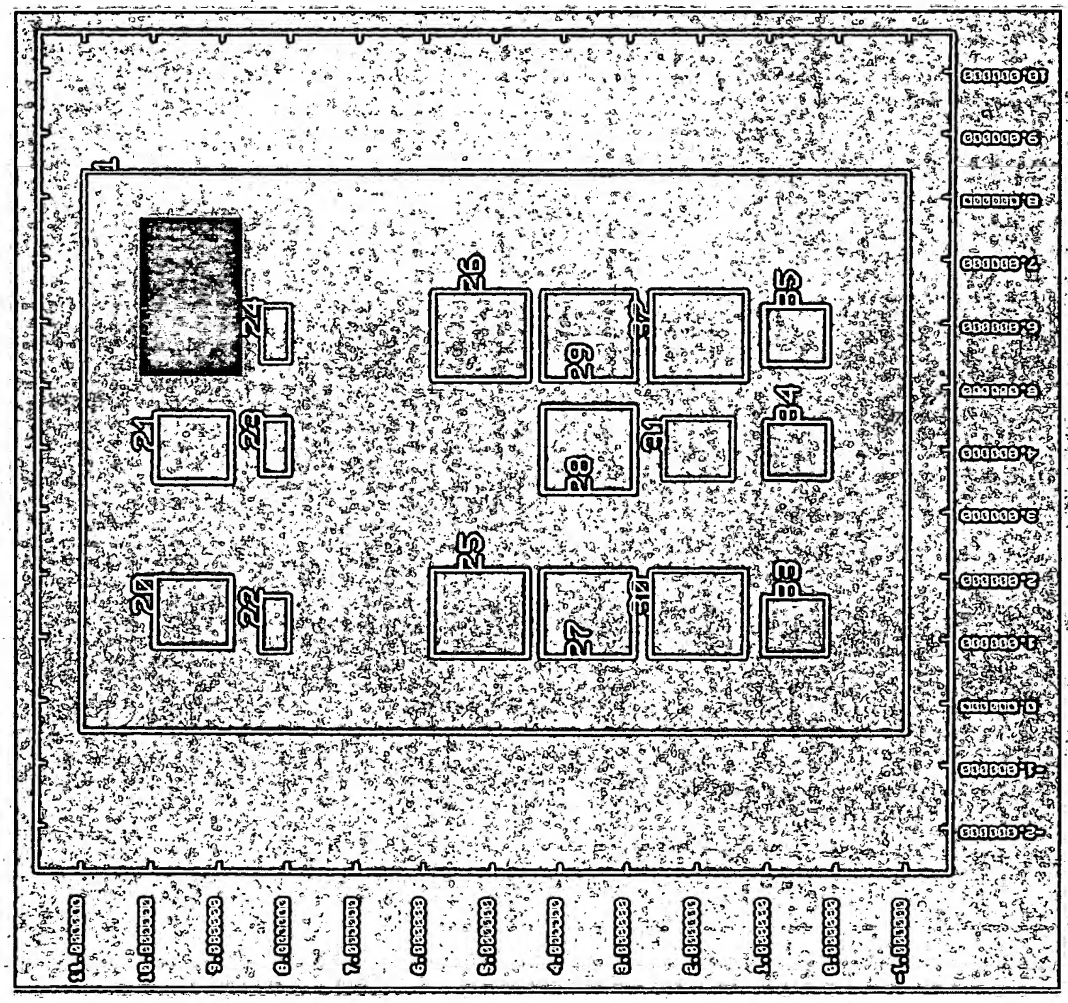


FIG. 8.

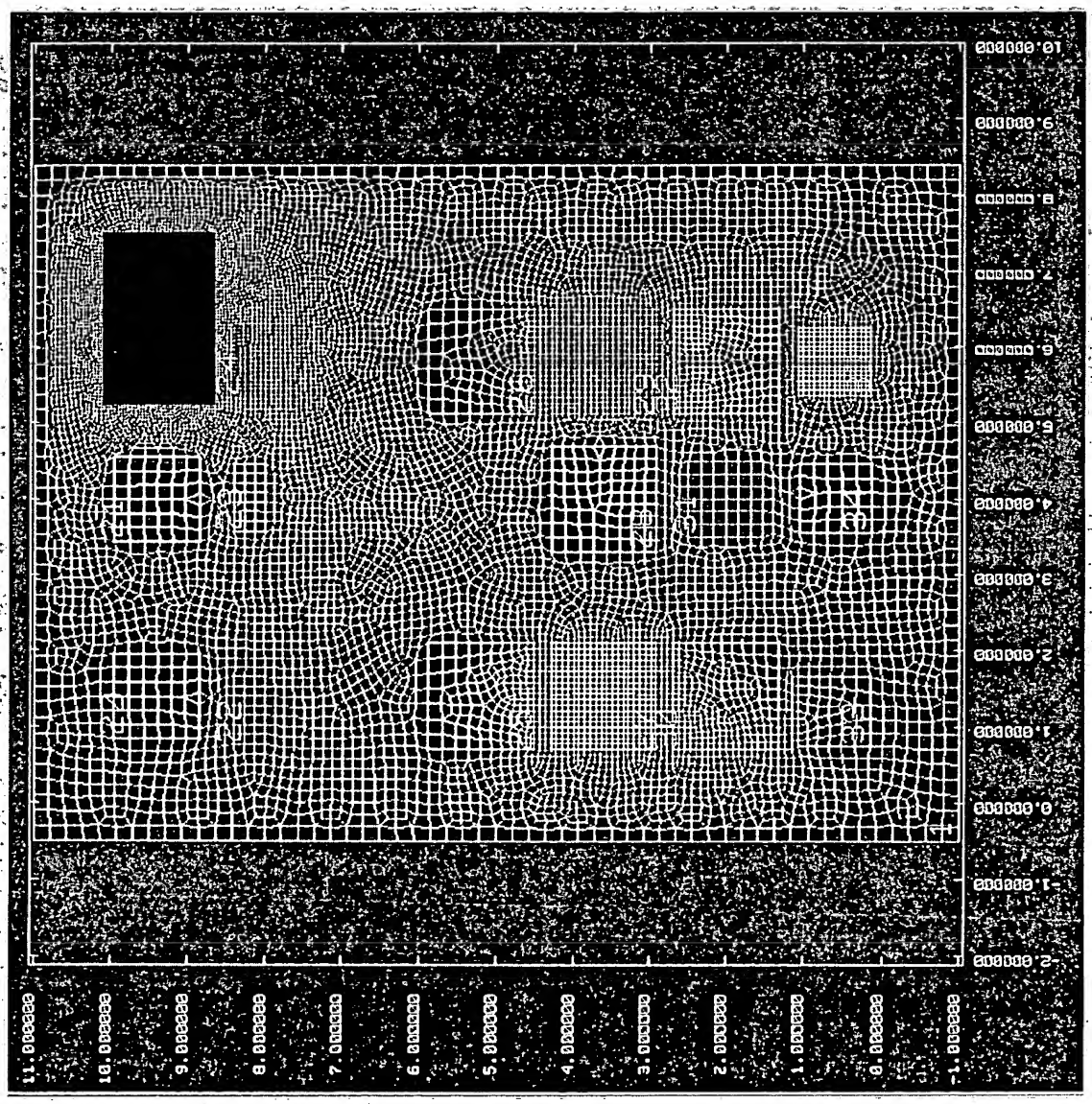
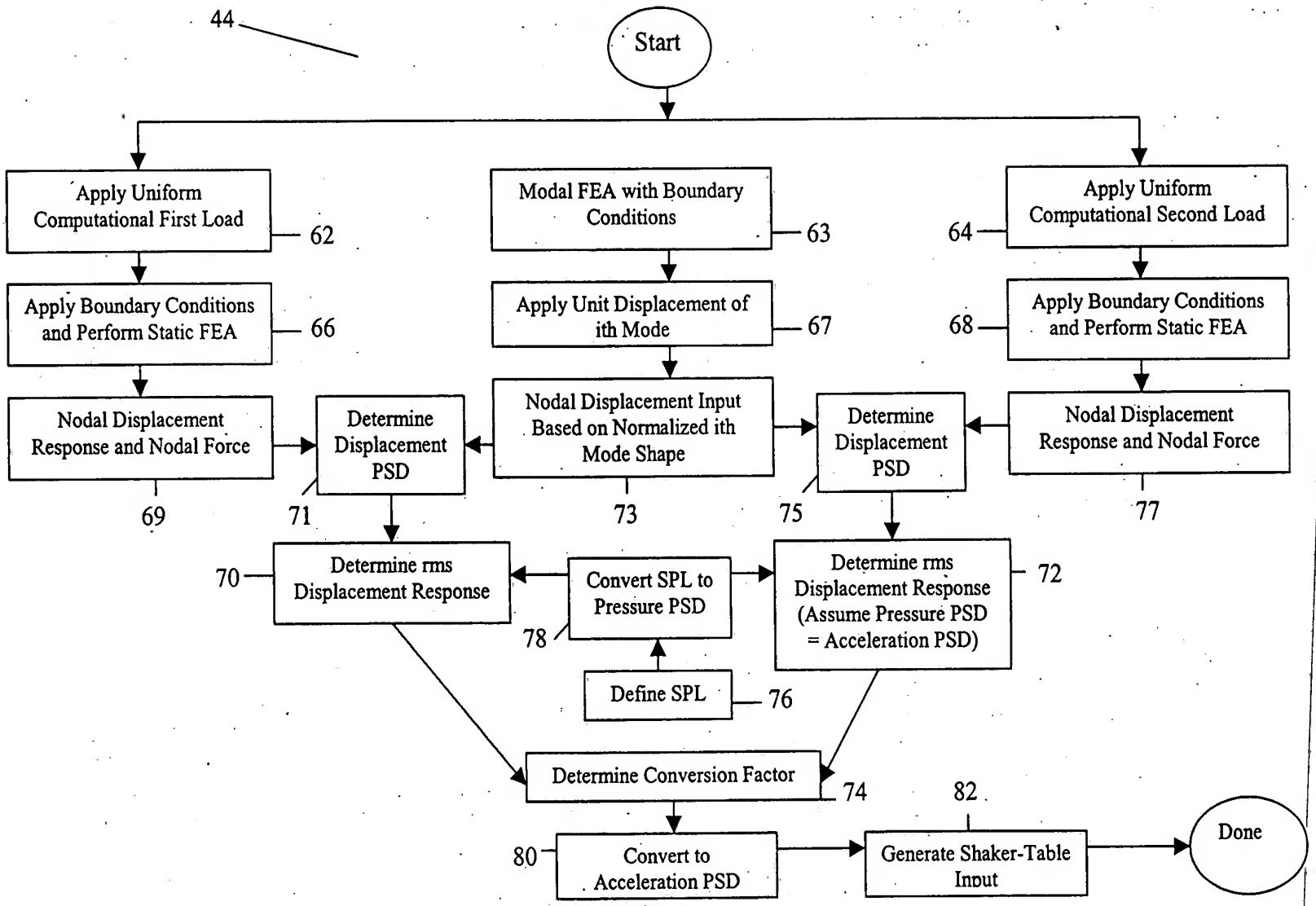


FIG. 9.

FIG. 10.



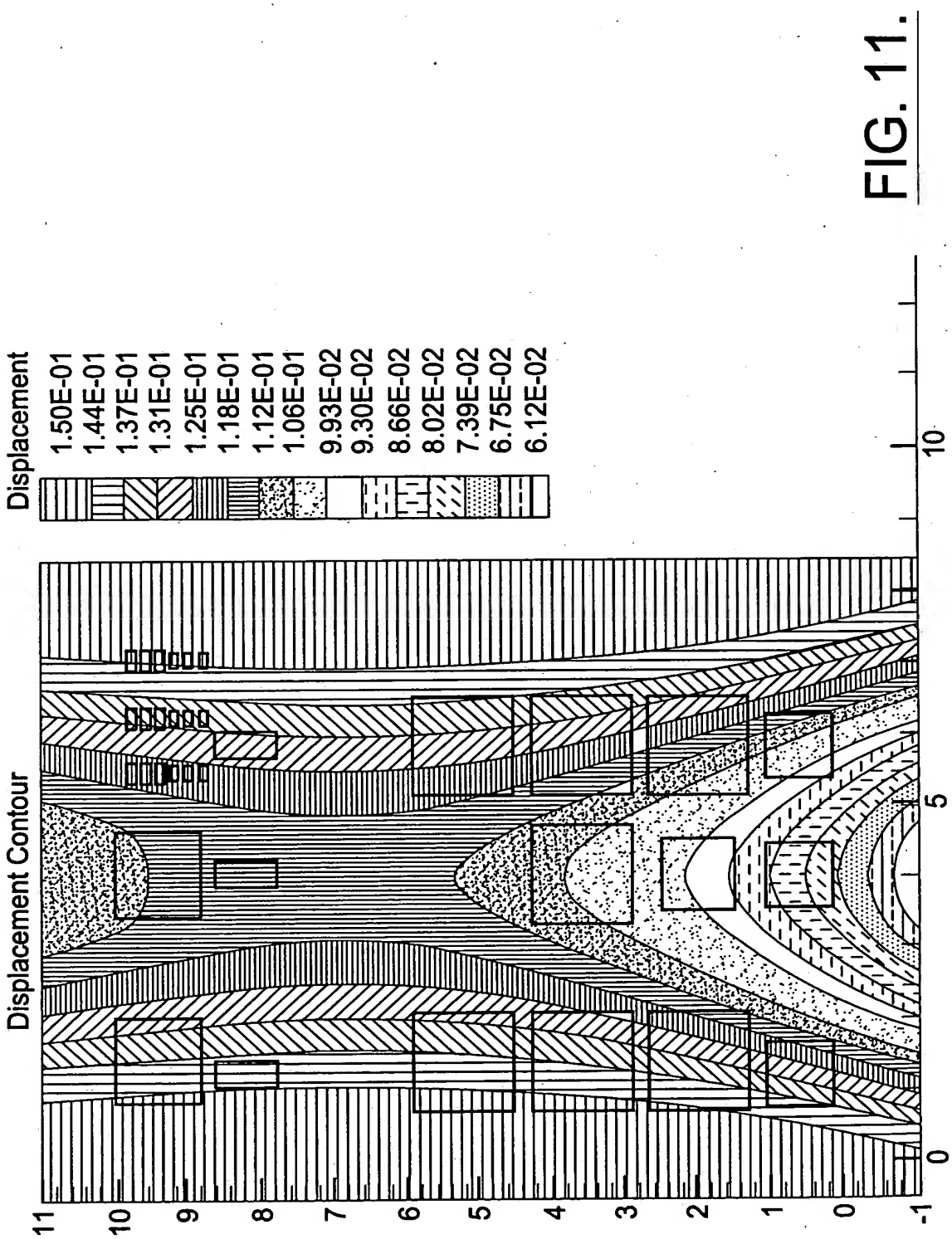
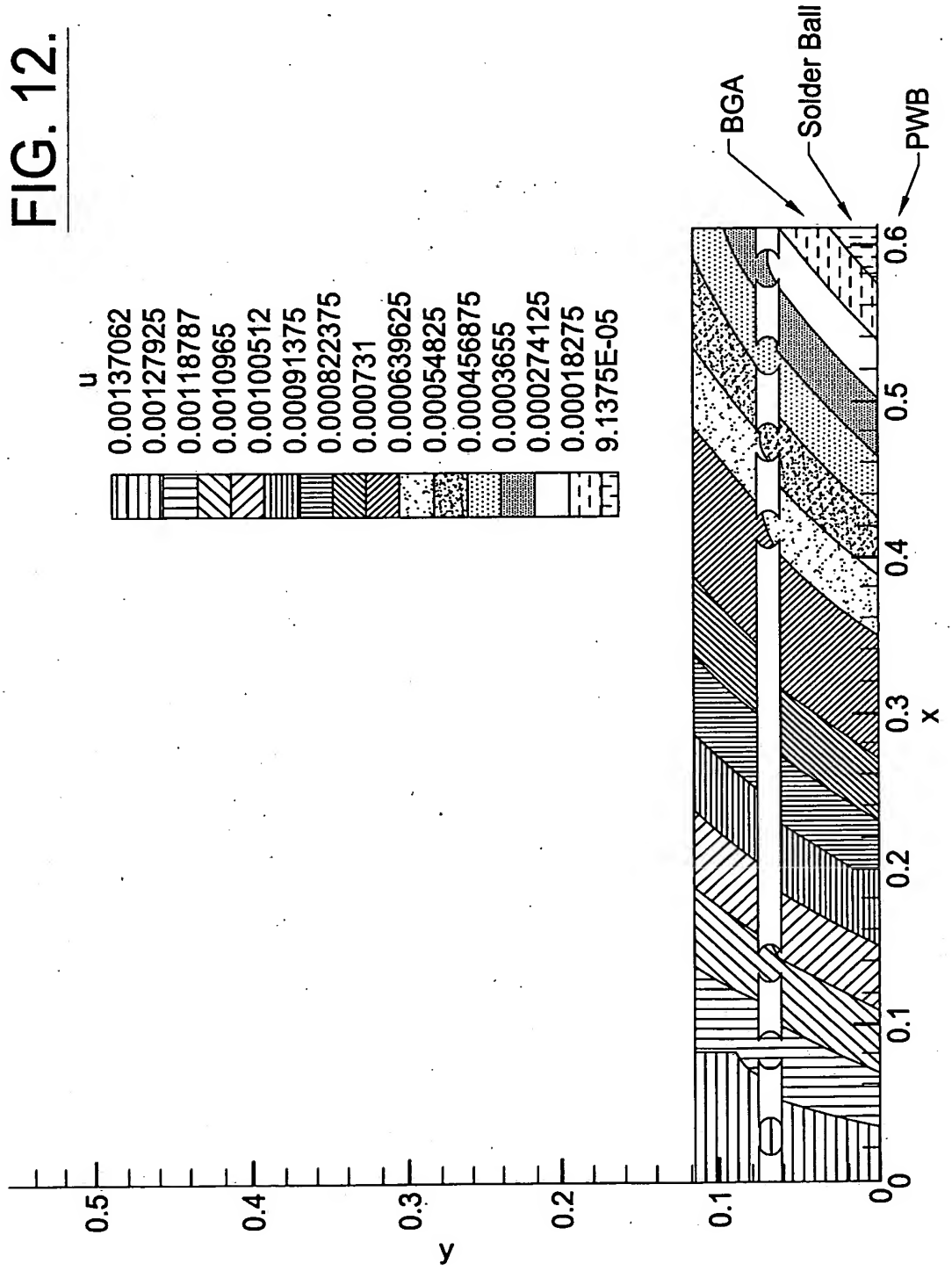


FIG. 11.

FIG. 12.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0.00018275
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Solder Ball
PWB
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y
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0.2
0.3
0.4
0.5
0.6

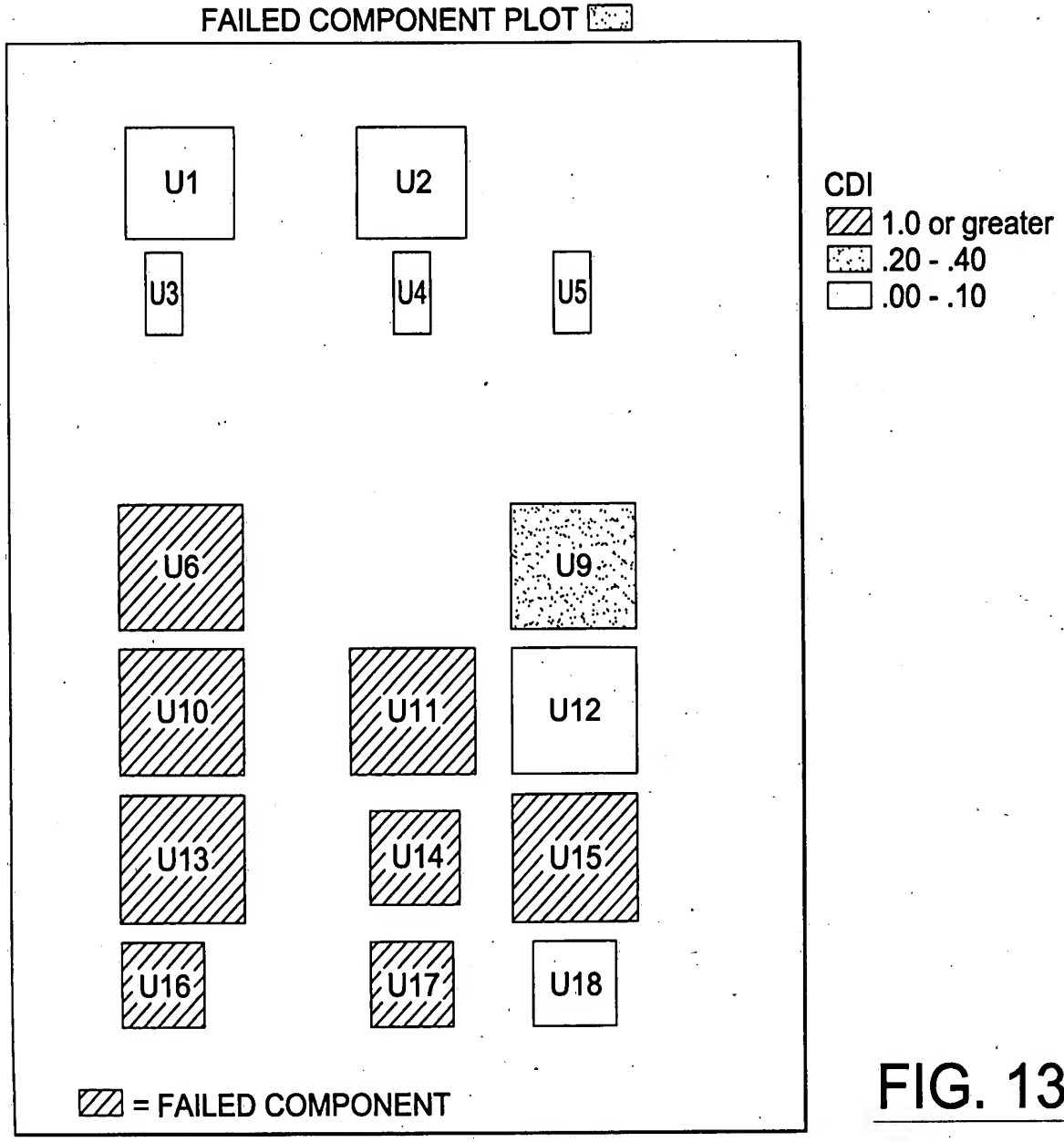

FIG. 13.